

10608.750	10673.750
10609.575	10674.575
10610.425	10675.425
10611.250	10676.250
10612.075	10677.075
10612.925	10677.925
10613.750	10678.750
10614.575	10679.575

(3) 1.25 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10550.625	10615.625
10551.875	10616.875
10553.125	10618.125
10554.375	10619.375
10555.625	10620.625
10556.875	10621.875
10558.125	10623.125
10559.375	10624.375
10560.625	10625.625
10561.875	10626.875
10563.125	10628.125
10564.375	10629.375
10565.625	10630.625
10566.875	10631.875
10568.125	10633.125
10569.375	10634.375
10570.625	10635.625
10571.875	10636.875
10573.125	10638.125
10574.375	10639.375
10575.625	10640.625
10576.875	10641.875
10578.125	10643.125
10579.375	10644.375
10580.625	10645.625
10581.875	10646.875
10583.125	10648.125
10584.375	10649.375

10585.625	10650.625
10586.875	10651.875
10588.125	10653.125
10589.375	10654.375
10590.625	10655.625
10591.875	10656.875
10593.125	10658.125
10594.375	10659.375
10595.625	10660.625
10596.875	10661.875
10598.125	10663.125
10599.375	10664.375
10600.625	10665.625
10601.875	10666.875
10603.125	10668.125
10604.375	10669.375
10605.625	10670.625
10606.875	10671.875
10608.125	10673.125
10609.375	10674.375
10610.625	10675.625
10611.875	10676.875
10613.125	10678.125
10614.375	10679.375

(4) 2.5 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10551.25	10616.25
10553.75	10618.75
10556.25	10621.25
10558.75	10623.75
10561.25	10626.25
10563.75	10628.75
10566.25	10631.25
10568.75	10633.75
10571.25	10636.25
10573.75	10638.75
10576.25	10641.25
10578.75	10643.75

10581.25 /1/	10646.25 /1/
10583.75 /1/	10648.75 /1/
10586.25 /1/	10651.25 /1/
10588.75 /1/	10653.75 /1/
10591.25 /1/	10656.25 /1/
10593.75 /1/	10658.75 /1/
10596.25 /1/	10661.25 /1/
10598.75 /1/	10663.75 /1/
10601.25 /1/	10666.25 /1/
10603.75 /1/	10668.75 /1/
10606.25 /1/	10671.25 /1/
10608.75 /1/	10673.75 /1/
10611.25 /1/	10676.25 /1/
10613.75 /1/	10678.75 /1/

/1/ These frequencies are also available for DEMS stations licensed, in operation, or applied for prior to July 15, 1993.

(5) 3.75 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10553.125	10618.125
10558.125	10623.125
10563.125	10628.125
10568.125	10633.125
10573.125	10638.125
10578.125	10643.125
10583.125	10648.125
10588.125	10653.125
10593.125	10658.125
10598.125	10663.125
10603.125	10668.125

(6) 5 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10552.5	10617.5

10557.5 . . . . .	10622.5
10562.5 . . . . .	10627.5
10567.5 /1/ . . . . .	10632.5 /1/
10572.5 /1/ . . . . .	10637.5 /1/
10577.5 /1/ . . . . .	10642.5 /1/
10582.5 /1/ . . . . .	10647.5 /1/
10587.5 . . . . .	10652.5
10592.5 . . . . .	10657.5
10597.5 . . . . .	10662.5
10602.5 . . . . .	10667.5

/1/ These frequencies are also available for DEMS stations licensed, in operation, or applied for prior to July 15, 1993.

(n) Point-to-multipoint systems licensed, in operation, or applied for in the 10,550 - 10,680 MHz band prior to July 15, 1993, are permitted to use the DEMS frequencies noted above if they prior coordinate such usage with the necessary parties including 10 GHz point-to-point applicants and licensees. DEMS Nodal Stations shall use the band 10,565 - 10,615 MHz while DEMS User Stations shall use the band 10,630 - 10,680 MHz.

(o) 10,700 to 11,700 MHz. 40 MHz authorized bandwidth.

(1) 1.25 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
11130.625 . . . . .	11620.625
11131.875 . . . . .	11621.875
11133.125 . . . . .	11623.125
11134.375 . . . . .	11624.375
11135.625 . . . . .	11625.625
11136.875 . . . . .	11626.875
11138.125 . . . . .	11628.125
11139.375 . . . . .	11629.375
11140.625 . . . . .	11630.625
11141.875 . . . . .	11631.875
11143.125 . . . . .	11633.125
11144.375 . . . . .	11634.375
11145.625 . . . . .	11635.625
11146.875 . . . . .	11636.875
11148.125 . . . . .	11638.125

11149.375	11639.375
11150.625	11640.625
11151.875	11641.875
11153.125	11643.125
11154.375	11644.375
11155.625	11645.625
11156.875	11646.875
11158.125	11648.125
11159.375	11649.375
11160.625	11650.625
11161.875	11651.875
11163.125	11653.125
11164.375	11654.375
11165.625	11655.625
11166.875	11656.875
11168.125	11658.125
11169.375	11659.375
11170.625	11660.625
11171.875	11661.875
11173.125	11663.125
11174.375	11664.375
11175.625	11665.625
11176.875	11666.875
11178.125	11668.125
11179.375	11669.375
11180.625	11680.625
11181.875	11681.875
11183.125	11683.125
11184.375	11684.375
11185.625	11685.625
11186.875	11686.875
11188.125	11688.125
11189.375	11689.375
11190.625	11690.625
11191.875	11691.875
11193.125	11693.125
11194.375	11694.375
11195.625	11695.625
11196.875	11696.875
11198.125	11698.125
11199.375	11699.375

(2) 2.5 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
11131.25 .....	11621.25
11133.75 .....	11623.75
11136.25 .....	11626.25
11138.75 .....	11628.75
11141.25 .....	11631.25
11143.75 .....	11633.75
11146.25 .....	11636.25
11148.75 .....	11638.75
11151.25 .....	11641.25
11153.75 .....	11643.75
11156.25 .....	11646.25
11158.75 .....	11648.75
11161.25 .....	11651.25
11163.75 .....	11653.75
11166.25 .....	11656.25
11168.75 .....	11658.75
11171.25 .....	11661.25
11173.75 .....	11663.75
11176.25 .....	11666.25
11178.75 .....	11668.75
11181.25 .....	11681.25
11183.75 .....	11683.75
11186.25 .....	11686.25
11188.75 .....	11688.75
11191.25 .....	11691.25
11193.75 .....	11693.75
11196.25 .....	11696.25
11198.75 .....	11698.75

(3) 3.75 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
11133.125 .....	11623.125
11138.125 .....	11628.125
11143.125 .....	11633.125

11148.125	11638.125
11153.125	11643.125
11158.125	11648.125
11163.125	11653.125
11168.125	11658.125
11173.125	11663.125
11178.125	11668.125
11183.125	11683.125
11188.125	11688.125
11193.125	11693.125
11198.125	11698.125

(4) 5 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
11132.5	11622.5
11137.5	11627.5
11142.5	11632.5
11147.5	11637.5
11152.5	11642.5
11157.5	11647.5
11162.5	11652.5
11167.5	11657.5
11172.5	11662.5
11177.5	11667.5
11182.5	11682.5
11187.5	11687.5
11192.5	11692.5
11197.5	11697.5

(5) 10 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10705	11205
10715	11215
10725 /2/	11675 /1/

10735	11225
10745	11235
10755	11245
10765	11255
10775	11265
10785	11275
10795	11285
10805	11295
10815	11305
10825	11315
10835	11325
10845	11335
10855	11345
10865	11355
10875	11365
10885	11375
10895	11385
10905	11395
10915	11405
10925	11415
10935	11425
10945	11435
10955	11445
10965	11455
10975	11465
10985	11475
10995	11485
11005	11495
11015	11505
11025	11515
11035	11525
11045	11535
11055	11545
11065	11555
11075	11565
11085	11575
11095	11585
11105	11595
11115	11605
11125	11615
11135 /1/	11625 /2/
11145 /1/	11635 /1/
11155 /1/	11645 /1/
11165 /1/	11655 /1/



11175 /1/ . . . . . 11665 /1/  
 11185 /1/ . . . . . 11685 /1/  
 11195 /1/ . . . . . 11695 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

/2/ These frequencies may be assigned for unpaired use.

(6) 30 MHz bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10715 . . . . .	11215
10755 . . . . .	11245
10795 . . . . .	11285
10835 . . . . .	11325
10875 . . . . .	11365
10915 . . . . .	11405
10955 . . . . .	11445
10995 . . . . .	11485
11035 . . . . .	11525
11075 . . . . .	11565
11115 . . . . .	11605
11155 /1/ . . . . .	11645 /1/
11185 /1/ . . . . .	11685 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

(7) 40 MHz bandwidth channels: /2/

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
10735 . . . . .	11225
10775 . . . . .	11265
10815 . . . . .	11305
10855 . . . . .	11345
10895 . . . . .	11385

10935	.....	11425
10975	.....	11465
11015	.....	11505
11055	.....	11545
11095	.....	11585
11135	/1/ .....	11625 /1/
11175	/1/ .....	11665 /1/

/1/ Alternate channels. These channels are set aside for narrow bandwidth systems and should be used only if all other channels are blocked.

/2/ In congested areas where 40 MHz channels block most 30 MHz channels, radios authorized for 30 MHz bandwidths may use the 40 MHz channels. In uncongested areas, 30 MHz channels should be used.

(p) 12,000 - 12700 MHz: The Commission has allocated the 12.2-12.7 GHz band for use by the broadcasting-satellite service. Private operational fixed point-to-point microwave stations authorized after September 9, 1983, will be licensed on a noninterference basis and are required to make any and all adjustments necessary to prevent interference to operating domestic broadcasting-satellite systems. Notwithstanding any other provisions, no private operational fixed point-to-point microwave stations are permitted to cause interference to broadcasting-satellite stations of other countries operating in accordance with the Region 2 plan for the broadcasting-satellite service established at the 1983 WARC.

(q) Special provisions for low power, limited coverage systems in the band segments 12.2-12.7 GHz. Notwithstanding any contrary provisions in this part the frequency pairs 12.220/12.460 GHz, 12.260/12.500 GHz, 12.300/12.540 GHz and 12.340/12.580 GHz may be authorized for low power, limited coverage systems subject to the following provisions:

- (i) Maximum equivalent isotropically radiated power (EIRP) shall be 55 dBm.
- (ii) The rated transmitter output power shall not exceed 0.500 watts.
- (iii) Frequency tolerance shall be maintained to within 0.01 percent of the assigned frequency.
- (iv) Maximum beamwidth not to exceed 4 degrees. However, the sidelobe suppression criteria contained in § 101.115 of this part shall not apply, except that a minimum front-to-back ratio of 38 dB shall apply.
- (v) Upon showing of need, a maximum bandwidth of 12 MHz may be authorized per frequency assigned.
- (vi) Radio systems authorized under the provisions of this section shall have

no more than three hops in tandem, except upon showing of need, but in any event the maximum tandem length shall not exceed 40 km (25 miles).

(vii) Interfering signals at the receiver antenna terminals of stations authorized under this section shall not exceed -90 dBm and -70 dBm respectively, for co-channel and adjacent channel interfering signals.

(viii) Stations authorized under the provisions of this section shall provide the protection from interference specified in § 101.105 to stations operating in accordance with the provisions of this part.

(r) 17,700 to 19,700 MHz: Applicants may use either a two-way link or one frequency of a frequency pair for a one-way link and must coordinate proposed operations pursuant to the procedures required in §101.103. (Note, however, that stations authorized as of September 9, 1983, to use frequencies in the band 17.7-19.7 GHz may, upon proper application, continue to be authorized for such operations.)

(1) 2 MHz maximum authorized bandwidth channel:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
18141.0 . . . . .	n/a

(2) 5 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
340 MHz Separation	
18762.5 . . . . .	19102.5
18767.5 . . . . .	19107.5
18772.5 . . . . .	19112.5
18777.5 . . . . .	19117.5
18782.5 . . . . .	19122.5
18787.5 . . . . .	19127.5
18792.5 . . . . .	19132.5
18797.5 . . . . .	19137.5
18802.5 . . . . .	19142.5

18807.5 . . . . .	19147.5
18812.5 . . . . .	19152.5
18817.5 . . . . .	19157.5

(3) 6 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
216 MHz Separation	
18145.0 . . . . .	n/a
18151.0 . . . . .	18367.0
18157.0 . . . . .	18373.0
18163.0 . . . . .	18379.0
18169.0 . . . . .	18385.0
18175.0 . . . . .	18391.0
18181.0 . . . . .	18397.0
18187.0 . . . . .	18403.0
18193.0 . . . . .	18409.0
18199.0 . . . . .	18415.0
18205.0 . . . . .	18421.0
18211.0 . . . . .	18427.0
18217.0 . . . . .	18433.0
18223.0 . . . . .	18439.0
18229.0 . . . . .	18445.0
18235.0 . . . . .	18451.0
18241.0 . . . . .	18457.0
18247.0 . . . . .	18463.0
18253.0 . . . . .	18469.0
18259.0 . . . . .	18475.0
18265.0 . . . . .	18481.0
18271.0 . . . . .	18487.0
18277.0 . . . . .	18493.0
18283.0 . . . . .	18499.0
18289.0 . . . . .	18505.0
18295.0 . . . . .	18511.0
18301.0 . . . . .	18517.0
18307.0 . . . . .	18523.0
18313.0 . . . . .	18529.0
18319.0 . . . . .	18535.0

18325.0 . . . . .	18541.0
18331.0 . . . . .	18547.0
18337.0 . . . . .	18533.0
18343.0 . . . . .	18559.0
18349.0 . . . . .	18565.0
18355.0 . . . . .	18571.0
18361.0 . . . . .	18577.0

(4) 10 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
1560 MHz Separation	
17705.0 . . . . .	19265.0
17715.0 . . . . .	19275.0
17725.0 . . . . .	19285.0
17735.0 . . . . .	19295.0
17745.0 . . . . .	19305.0
17755.0 . . . . .	19315.0
17765.0 . . . . .	19325.0
17775.0 . . . . .	19335.0
17785.0 . . . . .	19345.0
17795.0 . . . . .	19355.0
17805.0 . . . . .	19365.0
17815.0 . . . . .	19375.0
17825.0 . . . . .	19385.0
17835.0 . . . . .	19395.0
17845.0 . . . . .	19405.0
17855.0 . . . . .	19415.0
17865.0 . . . . .	19425.0
17875.0 . . . . .	19435.0
17885.0 . . . . .	19445.0
17895.0 . . . . .	19455.0
17905.0 . . . . .	19465.0
17915.0 . . . . .	19475.0
17925.0 . . . . .	19485.0
17935.0 . . . . .	19495.0
17945.0 . . . . .	19505.0
17955.0 . . . . .	19515.0
17965.0 . . . . .	19525.0

17975.0	19535.0
17985.0	19545.0
17995.0	19555.0
18005.0	18565.0
18015.0	19575.0
18025.0	19585.0
18035.0	19595.0
18045.0	19605.0
18055.0	19615.0
18065.0	19625.0
18075.0	19635.0
18085.0	19645.0
18095.0	19655.0
18105.0	19665.0
18115.0	19675.0
18125.0	19685.0
18135.0	19695.0

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340 MHz Separation

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18585.0	18925.0
18595.0	18935.0
18605.0	18945.0
18615.0	18955.0
18625.0	18965.0
18635.0	18975.0
18645.0	18985.0
18655.0	18995.0
18665.0	19005.0
18675.0	19015.0
18685.0	19025.0
18695.0	19035.0
18705.0	19045.0
18715.0	19055.0
18725.0	19065.0
18735.0	19075.0
18745.0	19085.0
18755.0	19095.0
18765.0	19105.0
18775.0	19115.0
18785.0	19125.0
18795.0	19135.0
18805.0	19145.0
18815.0	19155.0

(5) 20 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
1560 MHz Separation	
17710.0 . . . . .	19270.0
17730.0 . . . . .	19290.0
17750.0 . . . . .	19310.0
17770.0 . . . . .	19330.0
17790.0 . . . . .	19350.0
17810.0 . . . . .	19370.0
17830.0 . . . . .	19390.0
17850.0 . . . . .	19410.0
17870.0 . . . . .	19430.0
17890.0 . . . . .	19450.0
17910.0 . . . . .	19470.0
17930.0 . . . . .	19490.0
17950.0 . . . . .	19510.0
17970.0 . . . . .	19530.0
17990.0 . . . . .	19550.0
18010.0 . . . . .	19570.0
18030.0 . . . . .	19590.0
18050.0 . . . . .	19610.0
18070.0 . . . . .	19630.0
18090.0 . . . . .	19650.0
18110.0 . . . . .	19670.0
18130.0 . . . . .	19690.0
18590.0 . . . . .	18930.0
340 MHz Separation	
18610.0 . . . . .	18950.0
18630.0 . . . . .	18970.0
18650.0 . . . . .	18990.0
18670.0 . . . . .	19010.0
18690.0 . . . . .	19030.0
18710.0 . . . . .	19050.0
18730.0 . . . . .	19070.0
18750.0 . . . . .	19090.0
18770.0 . . . . .	19110.0

18790.0 . . . . .	19130.0
18810.0 . . . . .	19150.0

(6) 40 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
1560 MHz Separation	
17720.0 . . . . .	19280.0
17760.0 . . . . .	19320.0
17800.0 . . . . .	19360.0
17840.0 . . . . .	19400.0
17880.0 . . . . .	19440.0
17920.0 . . . . .	19480.0
17960.0 . . . . .	19520.0
18000.0 . . . . .	19560.0
18040.0 . . . . .	19600.0
18080.0 . . . . .	19640.0
18120.0 . . . . .	19680.0

(7) 80 MHz maximum authorized bandwidth channels:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
1560 MHz Separation	
17740.0 . . . . .	19300.0
17820.0 . . . . .	19380.0
17900.0 . . . . .	19460.0
17980.0 . . . . .	19540.0
18060.0 . . . . .	19620.0

(8) 220 MHz maximum authorized bandwidth channels:



TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
17810.0 . . . . .	18470.0
18030.0 . . . . .	19370.0
18250.0 . . . . .	19590.0

(9) The following frequencies are available for point-to-multipoint DEMS Systems:

	Nodal Station	User Station
Channel No.	Frequency band (MHz) limits	Frequency band (MHz) limits
25	18,820-18,830	19,160-19,170
26	18,830-18,840	19,170-19,180
27	18,840-18,850	19,180-19,190
28	18,850-18,860	19,190-19,200
29	18,860-18,870	19,200-19,210
30	18,870-18,880	19,210-19,220
31	18,880-18,890	19,220-19,230
32	18,890-18,900	19,230-19,240
33	18,900-18,910	19,240-19,250
34	18,910-18,920	19,250-19,260

(i) Each station will be limited to one frequency pair per SMSA. Additional channel pairs may be assigned upon a showing that the service to be provided will fully utilize the spectrum requested. A channel pair may be subdivided as desired by the licensee.

(ii) A frequency pair may be assigned to more than one licensee in the same SMSA or service area so long as the interference protection criteria of § 101.105 are met.

(10) Special provision for low power systems in the 17-700-19700 MHz band. Notwithstanding other provisions in this Rule part. licensees of point-to-multipoint channel pairs 25-29 may operate multiple low power transmitting devices within a defined service area. The service area will be a 28 kilometer omnidirectional radius originating from specified center reference coordinates. The specified center coordinates must be no closer than 56 kilometers from any co-channel nodal station or the specified center coordinates of another co-channel system. Applicants/licensees do not need to specify the location of each

individual transmitting device operating within their defined service areas. Such operations are subject to the following requirements on the low power transmitting devices:

(a) Power must not exceed one watt EIRP and 100 milliwatts transmitter output power.

(b) A frequency tolerance of 0.001% must be maintained.

(c) The mean power of emissions shall be attenuated in accordance with the following schedule:

(i) in any 4 kHz band, the center frequency of which is removed from the center frequency of the assigned channel by more than 50 percent of the channel bandwidth and is within the bands 18,820-18870 MHz or 19,19160-19,210 MHz:

$$A=35+.003(F-0.5B) \text{ dB}$$

or,  
80 dB (whichever is the lesser attenuation).

Where

A=Attenuation (in decibels) below output power level contained within the channel for a given polarization.

B=Bandwidth of channel in kHz.

F=Absolute value of the difference between the center frequency of the 4 kHz band measured at the center frequency of the channel in kHz.

(ii) In any 4 kHz band the center frequency of which is outside the bands 18.820-18.870 GHz: At least  $43+10\log_{10}(\text{mean output power in watts})$  decibels.

(s) Special provisions for low power, limited coverage systems in the band segments 21.8-22.0 GHz and 23.0-23.2 GHz. Notwithstanding any contrary provisions in this part the frequency pairs 21.825/23.025 GHz, 21.875/23.075 GHz, 21.925/23.125 GHz and 21.975/23.175 GHz may be authorized for low power, limited coverage systems subject to the following provisions:

(i) Maximum effective radiated power (ERP) shall be 55 dBm.

(ii) The rated transmitter output power shall not exceed 0.100 watts.

(iii) Frequency tolerance shall be maintained to within 0.05 percent of the assigned frequency.

(iv) Maximum beamwidth not to exceed 4 degrees. However, the sidelobe suppression criteria contained in § 101.115 of this part shall not apply, except that a minimum front-to-back ratio of 38 dB shall apply.

(v) Upon showing of need, a maximum bandwidth of 50 MHz may be authorized per frequency assigned.

(vi) Radio systems authorized under the provisions of this section shall have no more than five hops in tandem, except upon showing of need, but in any event the maximum tandem length shall not exceed 40 km (25 miles).

(vii) Interfering signals at the antenna terminals of stations authorized under this section shall not exceed -90 dBm and -70 dBm respectively, for co-channel and adjacent channel interfering signals.

(viii) Stations authorized under the provisions of this section shall provide the protection from interference specified in § 101.105 to stations operating in accordance with the provisions of this part.

(t) 31.0 to 31.3 GHz. These frequencies are shared on a co-equal basis with other stations in the fixed and mobile services (see Parts 74, 95, and 101). No interference protection is afforded to fixed or mobile stations operating in this band.

(1) 25 MHz authorized bandwidth channels, 150 MHz separation:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
31,012.5	31,162.5
31,037.5	31,187.5
31,062.5	31,212.5
31,087.5	31,237.5
31,112.5	31,262.5
31,137.5	31,287.5

(2) 50 MHz authorized bandwidth channels, 150 MHz separation:

TRANSMIT (receive) (MHz)	RECEIVE (transmit) (MHz)
31,025.0	31,175.0
31,075.0	31,225.0

31,125.0 . . . . . 31,275.0

(u) Assignments in the band 38,600-40,000 MHz must be according to the following frequency plan:

Channel Group A		Channel Group B	
Channel No.	Frequency band limits MHz	Channel No.	Frequency Band limits MHz
1-A	38,600-38,650	1-B	39,300-39,350
2-A	38,650-38,700	2-B	39,350-39,400
3-A	38,700-38,750	3-B	39,400-39,450
4-A	38,750-38,800	4-B	39,450-39,500
5-A	38,800-38,850	5-B	39,500-39,550
6-A	38,850-38,900	6-B	39,550-39,600
7-A	38,900-38,950	7-B	39,600-39,650
8-A	38,950-39,000	8-B	39,650-39,700
9-A	39,000-39,050	9-B	39,700-39,750
10-A	39,050-39,100	10-B	39,750-39,800
11-A	39,100-39,150	11-B	39,800-39,850
12-A	39,150-39,200	12-B	39,850-39,900
13-A	39,200-39,250	13-B	39,900-39,950
14-A	39,250-39,300	14-B	39,950-40,000

These channels are assigned for use within a rectangular service area to be described in the application by the maximum and minimum latitudes and longitudes. Such service area must be as small as practical consistent with the local service requirements of the carrier. These frequency plans may be subdivided as desired by the licensee and used within the service area as desired without further authorization subject to the terms and conditions set forth in § 101.149. These frequencies may be assigned only where it is shown that the applicant will have reasonable projected requirements for a multiplicity of service points or transmission paths within the area.

(v) Fixed systems licensed, in operation, or applied for in the 3,700-4,200, 5925-6425, 6,525-6,875, 10,550-10,680, and 10,700-11,700 MHz bands prior to July 15, 1993, are permitted to use channel plans in effect prior to that date, including adding channels under those plans.

(w) Operations on other than the listed frequencies may be authorized where it is shown that the objectives or requirements of the interference criteria prescribed in §101.105 could not otherwise be met to resolve the interference problems.(x) The frequency 27.255 MHz in the

27.23-27.28 MHz band is allocated for assignment to microwave auxiliary stations in this service on a shared basis with other radio services. Assignments to stations on this frequency will not be protected from such interference as may be experienced from the emissions of industrial, scientific and medical equipment operating on 27.12 MHz in accordance with § 2.106.

#### **§ 101.149 Special requirements for operation in the band 38,600 - 40,000 MHz**

Assigned frequency channels in the band 38,600 - 40,000 MHz may be subdivided and used anywhere in the authorized service area, subject to the following terms and conditions:

- (a) No interference may be caused to a previously existing station operating in another authorized service area.
- (b) Each operating station must have posted a copy of the service area authorization.
- (c) The antenna structure height employed at any location may not exceed the criteria set forth in § 17.7 of this chapter unless, in each instance, authorization for use of a specific maximum antenna structure for each location has been obtained from the FAA prior to the erection of the antenna.

### **Subpart D-Operational Requirements**

#### **§ 101.201 Station inspection.**

The licensee of each station authorized in the radio services included in this part must make the station available for inspection by representatives of the Commission at any reasonable hour.

#### **§ 101.203 Communications concerning safety of life and property.**

- (a) Handling and transmission of messages concerning the safety of life or property which is in imminent danger must be afforded priority over other messages.
- (b) No person may knowingly cause to be transmitted any false or fraudulent message concerning the safety of life or property, or refuse upon demand immediately to relinquish the use of a radio circuit to enable the transmission of messages concerning the safety of life or property which is in imminent danger, or knowingly interfere or otherwise obstruct the transmission of such messages.

#### **§ 101.205 Operation during emergency.**

The licensee of any station in these services may, during a period of emergency in which

normal communication facilities are disrupted as a result of hurricane, flood, earthquake, or similar disaster, utilize such station for emergency communication service in a manner other than that specified in the instrument of authorization: Provided, (a) That as soon as possible after the beginning of such emergency use, notice be sent to the Commission at Washington, D.C. stating the nature of the emergency and the use to which the station is being put, and (b) that the emergency use of the station must be discontinued as soon as substantially normal communication facilities are again available, and (c) that the Commission at Washington, D.C. must be notified immediately when such special use of the station is terminated, and (d) that, in no event, will any station engage in emergency transmission on frequencies other than, or with power in excess of, that specified in the instrument of authorization or as otherwise expressly provided by the Commission, or by law, and (e) that the Commission may, at any time, order the discontinuance of any such emergency communication.

**§ 101.207 Suspension of transmission.**

Transmission must be suspended immediately upon detection by the station or operator licensee or upon notification by the Commission of a deviation from the technical requirements of the station authorization and must remain suspended until such deviation is corrected, except for transmission concerning the immediate safety of life or property, in which case transmission must be suspended immediately after the emergency is terminated.

**§ 101.209 Operation of stations at temporary fixed locations for communication between the United States and Canada or Mexico.**

Stations authorized to operate at temporary fixed locations may not be used for transmissions between the United States and Canada, or the United States and Mexico, without prior specific notification to, and authorization from, the Commission. Notification of such intended usage of the facilities should include a detailed showing of the operation proposed, including the parties involved, the nature of the communications to be handled, the terms and conditions of such operations, the time and place of operation, such other matters as the applicant deems relevant, and a showing as to how the public interest, convenience and necessity would be served by the proposed operation. Such notification should be given sufficiently in advance of the proposed date of operation to permit any appropriate correlation with the respective foreign government involved (see §§ 101.31, 101.811, 101.813, and 101.815).

**§ 101.211 Operator requirements.**

(a) Any person, with the consent or authorization of the licensee, may employ stations in this service for the purpose of telecommunications in accordance with the conditions and limitations set forth in § 101.135 of this part.

(b) The station licensee is responsible for the proper operation of the station at all times and is expected to provide for observations, servicing and maintenance as often as may be necessary to ensure proper operation.

(c) The provisions of paragraph (a) of this section may not be construed to change or diminish in any respect the responsibility of station licensees to have and to maintain control over the stations licensed to them (including all transmitter units thereof), or for the proper functioning and operation of those stations (including all transmitter units thereof) in accordance with the terms of the licenses of those stations.

**§ 101.213 Station identification.**

Stations in these services are exempt from the requirement to identify transmissions by call sign or any other station identifier.

**§ 101.215 Posting of station authorization and transmitter identification cards, plates, or signs.**

(a) Each licensee shall post at the station the name, address and telephone number of the custodian of the station license or other authorization if such license or authorization is not maintained at the station.

(b) The requirements in paragraph (a) of this section do not apply to remote stations using frequencies listed in § 101.147(b).

**§ 101.217 Station Records.**

Each licensee of a station subject to this part shall maintain records in accordance with the following:

(a) For all stations, the results and dates of transmitter measurements and the name of the person or persons making the measurements.

(b) For all stations, when service or maintenance duties are performed, which may affect their proper operation, the responsible operator shall sign and date an entry in the station record concerned, giving:

(1) Pertinent details of all transmitter adjustments performed by him or under his supervision;

(2) His name and address, provided that this information, so long as it remains unchanged, is not required to be repeated in the case of a person who is regularly employed as operator on a full-time basis at the station.

(c) The records shall be kept in an orderly manner, and in such detail that the data required are readily available. Key letters or abbreviations may be used if proper meaning or explanation is set forth in the record.

(d) Each entry in the records of each station shall be signed by a person qualified to do so, having actual knowledge of the facts to be recorded.

(e) No record or portion thereof shall be erased, obliterated, or willfully destroyed within the required retention period. Any necessary correction may be made only by the person originating the entry, who shall strike out the erroneous portion, initial the correction made and indicate the date of correction.

(f) Records required by this part shall be retained by the licensee for a period of at least one year.

### **Subpart E-Miscellaneous Common Carrier Provisions**

#### **§ 101.301 National defense; free service.**

Any common carrier authorized under the rules of this part may render to any agency of the United States Government free service in connection with the preparation for the national defense. Every such carrier rendering any such free service must make and file, in duplicate, with the Commission, on or before the 31st of July and on or before the 31st day of January in each year, reports covering the periods of 6 months ending on the 30th of June and the 31st of December, respectively, next prior to said dates. These reports must show the names of the agencies to which free service was rendered pursuant to this rule, the general character of the communications handled for each agency, and the charges in dollars which would have accrued to the carrier for such service rendered to each agency if charges for such communications had been collected at the published tariff rates.

#### **§ 101.303 Answers to notices of violation.**

Any person receiving official notice of a violation of the terms of the Communications Act of 1934, as amended, any other Federal statute or Executive Order pertaining to radio or wire communications or any international radio or wire communications treaty or convention, or regulations annexed thereto to which the United States is a party, or the rules and regulations of the Federal Communications Commission, must, within 10 days from such receipt, send a written answer to the office of the Commission originating the official notice. If an answer cannot be sent or an acknowledgment made within such 10-day period by reason of illness or other unavoidable circumstances, acknowledgment and answer must be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice must be complete in itself and may not be abbreviated by reference to other communications or answers to other notices. If the notice relates to some violation that may be due to the physical or electrical characteristics of transmitting apparatus, the answer must state fully what steps have been taken to prevent future violations, and, if any new apparatus is to be installed, the date such apparatus was ordered, the name of the manufacturer, and promised date of delivery. If the installation of such apparatus requires a construction permit, the file number of the application must be given or, if a file number has not been assigned by the Commission, such identification as will permit ready reference thereto. If the notice of



violation relates to inadequate maintenance resulting in improper operation of the transmitter, the name and license number of the operator performing the maintenance must be given. If the notice of violation relates to some lack of attention to, or improper operation of, the transmitter by other employees, the reply must enumerate the steps taken to prevent a recurrence of such lack of attention or improper operation.

**§ 101.305 Discontinuance, reduction or impairment of service.**

(a) If the public communication service provided by a station in the Common Carrier Radio Services is involuntarily discontinued, reduced or impaired for a period exceeding 48 hours, the station licensee must promptly notify the Commission, in writing, at Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania 17325. In every such case, the licensee must furnish full particulars as to the reasons for such discontinuance, reduction or impairment of service, including a statement as to when normal service is expected to be resumed. When normal service is resumed, prompt notification thereof must be given in writing to the Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania 17325.

(b) No station licensee subject to title II of the Communications Act of 1934, as amended, may voluntarily discontinue, reduce or impair public communication service to a community or part of a community without obtaining prior authorization from the Commission pursuant to the procedures set forth in part 63 of this chapter. In the event that permanent discontinuance of service is authorized by the Commission, the station licensee must promptly send the station license to the Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania 17325 for cancellation.

(c) Any common carrier station licensee, not subject to title II of the Communications Act of 1934, as amended, who voluntarily discontinues, reduces or impairs public communication service to a community or a part of a community must give written notification to the Commission within 7 days thereof. In the event of permanent discontinuance of service, the station licensee must promptly send the station license to the Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania 17325 for cancellation.

(d) If any common carrier radio frequency should not be used to render any service as authorized during a consecutive period of twelve months at any time after construction is completed under circumstances that do not fall within the provisions of paragraph (a), (b), or (c) of this section, or, if removal of equipment or facilities has rendered the station not operational, the licensee must, within thirty days of the end of such period of nonuse:

(1) Submit for cancellation the station license (or licenses) to the Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, Pennsylvania 17325 for cancellation.